REMARKS

Claims 20-31 are pending in the subject application. Claims 20 and 26 are currently amended. Claims 20 and 26 are independent.

Claims 20-31 are presented to the Examiner for further prosecution on the merits.

A. Introduction

In the outstanding Office Action Made Final, the Examiner rejected claim 30 under 35 U.S.C. § 112, first paragraph; rejected claims 20-29 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,891,235 to Furukawa et al. ("the Furukawa et al. reference") in view of U.S. Patent No. 6,316,297 to Matsuda ("the Matsuda reference"); and indicated that claim 31 recites allowable subject matter, but objected to claim 31 as being dependent upon a rejected base claim.

B. Asserted Rejection of Claim 30 Under 35 U.S.C. § 112, First Paragraph

In the outstanding Office action, the Examiner rejected claim 30 under 35 U.S.C. § 112, first paragraph. Applicants respectfully traverse this rejection for at least the reasons set forth below.

Claim 30 was added by the amendment filed September 28, 2005, and recites,

> 30. The MOS transistor as claimed in claim 26, wherein the surface insulating layer completely fills the undercut region.

In the September 28th amendment, applicants indicated that support for claim 30 could be found in, e.g., paragraph [0038] of the specification. Paragraph [0038], as originally filed, recites,

> [0038] Thus, the lower insulating layer 170 covers an entire surface of the surface insulating layer 150 and also fills the undercut region of the gate pattern 140. *In case the undercut region is narrow, the surface insulating layer 150 alone may fill the undercut region.*
>
> (*emphasis added*)

In response to the amendment after final filed on February 1, 2006, the Examiner issued an Advisory Action on March 1, 2006, wherein the Examiner maintained the rejection of claim 30 under 35 U.S.C. § 112, first paragraph. In particular, the Examiner asserted that the phrase "the surface insulating layer 150 alone may fill the undercut region" means that "the insulating layer 150 fill the undercut region but not completely fill the undercut region." *Advisory Action of March 1, 2006, continuation sheet.* Applicants respectfully disagree, and submit that the Examiner is applying the wrong analysis in this rejection.

The Merriam-Webster dictionary of the English language defines the verb "to fill" as including the following meanings: "to put into as much as can be held or conveniently contained," "to supply with a full complement," and "to occupy the whole of." That is, the verb "to fill" includes the meaning "to completely fill."

Applicants respectfully submit that no further argument is necessary on this point. In particular, applicants respectfully submit that as long as the specification reasonably supports applicants' claim language, there can be no basis for the rejection of claim 30 under 35 U.S.C. § 112, first paragraph.

Nonetheless, applicants also note that the specification reads "the surface insulating layer 150 *alone* may fill the undercut region" (emphasis added). The word *alone* further modifies the meaning of the phrase at issue by clarifying that the only thing filling the undercut region is the insulating layer, i.e., the undercut region is completely filled by the insulating layer 150. Accordingly, applicants respectfully submit that it there is no basis for the Examiner to assert that claim 30 is not supported by the original specification.

In particular, applicants submit that the Examiner is applying the wrong analysis to the language of the specification. The specification need only provide a single reasonable

meaning that is harmonious with the claim language. It does *not* have to exclude every other possible meaning. Accordingly, applicants respectfully submit that the rejection of claim 30 under 35 U.S.C. § 112, first paragraph, is improper, and respectfully request that this rejection be reconsidered and withdrawn.

C. Asserted Obviousness Rejection of Claims 20-29

In the outstanding Office action, the Examiner rejected claims 20-29 under 35 U.S.C. § 103(a) as being unpatentable over the Furukawa et al. reference in view of the Matsuda reference. Applicants respectfully traverse this rejection for at least the reasons set forth below.

Independent claim 20, as currently amended, recites, in part:

> an L-shaped lower spacer covering a top surface of the semiconductor substrate at both sides of the T-shaped gate electrode and covering sides of the wide portion of the T-shaped gate electrode, the L-shaped lower spacer having a first element disposed substantially perpendicular to the semiconductor substrate, and having a second element disposed substantially parallel to the semiconductor substrate, the second element extending from the first element laterally away from the T-shaped gate electrode, wherein the first element and the second element intersect to define a substantially 90 degree angle in an outer surface of the L-shaped lower spacer;

In the outstanding Office action, the Examiner asserted that the Furukawa et al. reference discloses this aspect of claim 20, including, *inter alia*, an L-shaped lower spacer (indicating element 48 in FIG. 3e of the Furukawa et al. reference). *See the Office action of December 8, 2005, at paragraph 5, page 3.*

By the instant amendment, applicants have amended claim 20 to more particularly recite the shape of the L-shaped spacer. Applicants respectfully submit that none of the cited prior art references disclose, or even suggest, first and second elements intersecting to define a substantially 90 degree angle in an outer surface of the L-shaped lower spacer.

Accordingly, applicants respectfully submit that claim 20 is allowable over the proposed combination of prior art references.

The remaining rejected claims, viz., claims 21-29, depend, either directly or indirectly, from claim 20, and are believed to be similarly allowable. Accordingly, applicants respectfully request that this rejection be reconsidered and withdrawn, and a notice of allowance provided.

D. Amendment to Claim 26

Claim 26 was amended in the amendment after final filed on February 1, 2006, so as to present claim 26 in independent form. Applicants note that the Advisory Action of March 1, 2006, indicated that, for the purposes of appeal, the February 1st amendment would be entered.

Further to the February 1st amendment, claim 26 is presented in the instant amendment in independent form. The mark-ups to claim 26 reflect only the current amendment, i.e., the addition of the phrase "<u>, wherein the first element and the second element intersect to define a substantially 90 degree angle in an outer surface of the L-shaped lower spacer</u>."

Claim 26 is believed to be allowable for at least the reasons set forth above regarding claim 20. Moreover, applicants respectfully submit that the outstanding rejection of claim 26 under 35 U.S.C. § 103(a) over the combination of the Furukawa et al. and Matsuda references is improper for at least the reasons set forth below.

Claim 26 differs from claim 20 by additionally reciting the following:

> . . . further comprising a surface insulating layer intervened between the narrow portion of the gate electrode and the lower spacer.

In the outstanding Office action, the Examiner asserted that the Furukawa et al. reference discloses a surface insulating layer (48) intervened between the gate electrode (20) and the lower spacer (48). In particular, the Examiner asserted that:

> as interpreting the claim in a broad scope, a surface insulating layer can also be the same as the lower spacer because the claims do not distinct the material of the lower spacer and the surface insulating layer. Therefore, the lower spacer and the surface insulating layer are considered as one layer.
>
> *See the Office action of December 8, 2005, at page 6.*

In other words, the Examiner asserted that the surface insulating layer and the lower spacer are one and the same. Applicants respectfully submit that this construction of claim 26 is clearly improper.

In particular, applicants submit that the Examiner's construction of claim 26 effectively removes all meaning from the claim, and, by equating the surface insulating layer with the lower spacer, effectively makes claim 26 read thus: "further comprising Element A intervened between Element B and Element A." Thus, the Examiner's construction of claim 26 effectively eliminates the recitation of the surface insulating layer, thereby gutting claim 26 of meaning. This is contrary to well-settled law. See, e.g., *Phillips v. AWH Corp.*, 415 F.3d 1301 (Fed. Cir. 2005) (en banc), which states that "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim," citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004).

In view of the above, applicants respectfully submit that Examiner must give proper weight to the recitation of a surface insulating layer in claim 26. Applicants respectfully request that the rejection of claim 26 be reconsidered and withdrawn, and request that a notice of allowance be provided.

E. Allowable Subject Matter

Applicants appreciate the Examiner's indication of allowable subject matter in claim 31. However, applicants respectfully submit that all of the pending claims are in condition for allowance, and respectfully request that a notice to that effect be provided.

F. Conclusion

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,
LEE & MORSE, P.C.

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PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.